



## *Washington State Department of Printing*

# **2004 Sustainability Plan Progress Report and Update**

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## **Policy Statement**

Sustainability can be defined simply as the application of the Golden Rule from generation to generation. Sustainable organizations use, develop, and protect resources in a way that meets current needs without sacrificing the requirements of future generations. As the demands on our natural resources increase, agencies must implement sustainable practices to safeguard the environmental health, economic growth, and quality of life of Washington's citizens.

The Department of Printing (PRT) has long been a leader in environmentally responsible printing, with a strong tradition of recycling, pollution prevention and socially responsible purchasing. The agency is dedicated to the continued use of sustainable practices to protect the health and safety of customers, employees and the surrounding community, to ensure excellent product quality, and to provide new opportunities for economic success.

## **The PRT Sustainability Team**

In support of our sustainability efforts, a team of PRT employees from every work section meets regularly to discuss progress toward meeting Sustainability Plan goals and share ideas about future improvements. The following is a list of the members of the fiscal year 2003 Department of Printing Sustainability Team:

- Kelley Kellerman, Sustainability Coordinator/Marketing
- Tom Beattie, Facilities
- Mel Caldwell, Bindery
- Lynn DeGallery, Customer Service
- Steve Freymond, Information Technology
- Kathy Forbes, Executive Assistant
- Chyllynn Hansel, Employee Services
- Oliver Hurd, Purchasing
- Eric Long, Copy Centers
- Dan Maygra, Prepress
- Jeannie Simpson, Print Outsourcing
- Dan Smith, Press

## **Contact Information**

If you have any questions or comments about this report or sustainability efforts at the Department of Printing, please contact:

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## Executive Summary

Overall, the Department of Printing made substantial progress toward achieving the goals set in the agency's 2003 Sustainability Plan. The Executive Management Team is firmly committed to making the Department of Printing a sustainable organization, and a majority of the agency's managers actively participate on the Sustainability Team. Progress has been made toward almost every goal and objective set in the plan, with several objectives achieved ahead of schedule.

However, the agency continues to struggle with the challenge of balancing sustainability initiatives with production schedules, employee workloads, technology limitations, and cost efficiencies. For example, it is difficult to switch to high-recycled-content paper without adversely affecting the cost of printing for state agencies because the cost of virgin white paper remains six to seven percent lower than that of recycled stock.

### **Long-term goals:**

The 2003 Department of Printing Sustainability Plan set five long-term goals for reducing energy and water use, decreasing hazardous waste, and switching to clean energy sources. While the agency initially experienced challenges in gathering data to measure progress toward these goals, it is currently establishing new baseline data at fiscal year 2004-05 levels and processes are in place to ensure ongoing accurate measurements in the future. For the most part, the agency is still on track for achieving the 2003 Sustainability Plan long-term goals within the original time frame.

### **Short-term objectives:**

In addition to long-term goals, the 2003 PRT Sustainability Plan included a number of short-term objectives. The following table shows whether each of these objectives was Achieved, Making Progress, or Delayed at the time this progress report was written. Additional sustainability efforts and details about these 2003 plan objectives are located in the "Reporting on 2003 Objectives" section on page six.

| <b>2003 Plan Objective</b>  | <b>Achieved</b> | <b>Making Progress</b> | <b>Delayed</b> |
|---|-----------------|------------------------|----------------|
| Include sustainability goals in all agency and division strategic plans by July 2004.   |                 | ●                      |                |
| Establish a Sustainable Practices Team composed of employees from every department to discuss opportunities, assess agency progress in achieving sustainability plan goals, and make recommendations for future action. | ●               |                        |                |
| Create a process to collect employee suggestions for improving sustainable practices throughout the agency by January 2004.   |                 | ●                      |                |
| Include sustainable practices in the new-employee orientation on the agency intranet by January 2005.   |                 | ●                      |                |
| Post quarterly and annual updates on progress toward achieving sustainability and pollution prevention goals on bulletin boards and the agency intranet starting January 2005.  |                 | ●                      |                |
| Continue to include waste management and sustainable practices issues in monthly employee safety meetings.  | ●               |                        |                |

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|---|---|---|---|
| Provide online sustainability information, training opportunities, and links on the agency intranet by January 2005.  |   | ● |   |
| Recommend that all individual employee training plans include classes about sustainability.   |   | ● |   |
| Expand and update information about PRT's environmentally responsible production processes for the agency Web site.   | ● |   |   |
| Include articles about sustainable printing practices in agency newsletters for employees and external customers.   | ● |   |   |
| Encourage supervisors and managers to include sustainability information in weekly staff meetings.  |   | ● |   |
| Establish baseline energy and water usage levels at fiscal year 2002.   |   | ● |   |
| Switch to computer-to-plate printing by 2005 to reduce the use of film and processing solutions.  | ● |   |   |
| Work with General Administration to repair water leaks and install energy-efficient lighting wherever possible.   | ● |   |   |
| Establish a written "turn it off" policy to reduce energy drains from unused office machines, production equipment and small appliances.  |   |   | ● |
| Reduce energy demands by purchasing Energy Star certified computers, small appliances and office equipment.   |   | ● |   |
| Encourage car-pooling, use of mass transit, and other commute reduction strategies to reduce the amount of pollution produced by employees in traveling to and from work.                     |   | ● |   |
| Initiate a vehicle maintenance program by January 2004 to reduce oil leaks and other sources of pollution and ensure all agency-owned vehicles perform with highest fuel efficiency possible. |   | ● |   |
| Increase employee recycling of glass, aluminum, plastic, and cardboard.   |   | ● |   |
| Implement a regular inspection and maintenance process to ensure all ventilation systems are operating effectively by January 2004.   | ● |   |   |
| Continue to use only processed chlorine-free paper with the highest recycled fiber content possible for all in-house stock and office paper.  | ● |   |   |
| Purchase only remanufactured toner cartridges for all copiers and printers, and recycle all used cartridges.  |   | ● |   |

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|--|---|---|--|
| Ensure all new and replacement office furniture is constructed of non-toxic, renewable materials, using refinished or surplus furniture whenever possible. |   | ● |  |
| Shift purchasing of office supplies to use pens, pencils, clips, etc. that are recyclable and are made from recycled materials.                            |   | ● |  |
| Seek out vendors who use sustainable processes and production materials when bidding jobs to private printers and binderies.                               |   | ● |  |
| Amend custodial service contracts to require the use of organic, non-phosphate cleaning agents.  | ● |   |  |
| Purchase supplies and equipment that support sustainable goals.  |   | ● |  |
| Establish a system for monitoring and tracking waste produced in all production areas to find opportunities for further reduction.                         |   | ● |  |
| Print two-sided documents whenever possible.   |   | ● |  |
| Recycle all fluorescent lights.  | ● |   |  |

#### ***New and Updated Goals and Objectives:***

After evaluating progress toward current goals, the Department of Printing has set the following new or updated goals and objectives for the agency Sustainability Plan. Detailed explanations of these goals and objectives are available in the “New and Updated Goals and Objectives” section on page 18.

| <b><i>Goal or Objective</i></b>   | <b><i>Due Date</i></b> | <b><i>Responsibility</i></b>       | <b><i>Performance Measure</i></b>  |
|---|------------------------|------------------------------------|--|
| Purchase computers and electronics with the lowest level of PBTs possible, and return used computers to vendors for recycling or remanufacturing. | July 2005              | Information Technology             | Number of computers replaced or recycled.                                    |
| Recycle all shrinkwrap and other plastic packaging materials.   | July 2005              | Bindery                            | Quantity of shrink-wrap, plastic bags, and other plastic materials recycled. |
| Use re-refined motor oil whenever possible for servicing all agency fleet vehicles and recycle all used oil to keep PBTs out of the environment.  | July 2006              | Facilities Management              | Percentage of recycled oil used according to vehicle service records.        |
| Switch all existing diesel-powered vehicles in the PRT fleet to B20 biodiesel fuel.   | July 2009              | Facilities Management and Shipping | Percentage of vehicles powered by biodiesel blends.                          |

## Long-term Goals

The process of achieving sustainability requires careful planning and thoughtful implementation. Some sustainability goals require years to complete due to constraints on staff time, funding, and the availability of products and technology. The Department of Printing experienced these and other challenges in working to accomplish the long-term goals set in the 2003 Sustainability Plan. The following list details the progress PRT has made so far in accomplishing long-term sustainability goals.

### ***Goal: Replace at least half of gasoline/diesel-powered delivery vehicles with hybrid or alternative-fuel vehicles by 2015.***

The Department of Printing did not purchase any new or replacement vehicles during fiscal year 2003, and continues to operate the same number of gasoline and diesel powered vehicles as fiscal year 2002.

Facilities Manager investigated switching all diesel-powered PRT delivery vehicles to biodiesel in 2004. However, the higher cost of biodiesel fuel and the expense of making the necessary adaptations to the existing fleet made it financially impractical to proceed with biodiesel at this time.

The agency will continue to review the feasibility of eliminating the use of diesel fuel as B20 or other biodiesel products become more readily available and cost effective.

### ***Goal: Reduce hazardous waste by 10% by 2010.***

Data from fiscal year 2003-04 were to be used as the baseline for determining progress toward reducing the amount of hazardous waste produced at PRT. Because the agency has implemented new platemaking procedures and changed to non-toxic press solutions, it is thought that the amount of hazardous waste has already fallen by over 10 percent over fiscal year 2003 levels. However, hard data is currently unavailable regarding agency progress in reducing hazardous waste due to the misplacement of data files during multiple staff turnovers in the PRT Facilities Management Section.

The agency will review records and re-establish baseline hazardous waste levels during fiscal year 2004, and progress reports will be made in the next Sustainability Plan Update in 2005. It is likely that PRT will be able to meet this goal by the original due date.

### ***Goal: Purchase 10% of energy from clean, renewable resources by June 2010.***

Data from fiscal year 2003-04 were to be used as the baseline for determining progress toward moving from nonrenewable fossil fuels to clean, renewable energy sources. However, information is currently unavailable regarding agency attempts to move to clean energy resources due to staff turnover in the PRT Facilities Management Section.

The agency will investigate the availability and cost of alternative energy sources during fiscal year 2004, and progress reports will be made in the next Sustainability Plan Update in 2005. It is likely that PRT will be able to meet this goal by the original due date.

### ***Goal: Reduce water use by 5% by fiscal year 2007.***

Data from fiscal year 2003-04 were to be used as the baseline for determining progress toward reducing the amount of water used by all PRT facilities. However, baseline water use data is currently unavailable due to the loss of computer files during staff turnover in the PRT Facilities Management Section. Therefore, there is no substantiated data to support any reporting of progress toward this goal.

New baselines will be established for water use by PRT using fiscal year 2004-05 data, and the Facilities Management Department will be responsible for gathering measurements. Progress reports will be made in the next Sustainability Plan Update in 2005, and it is expected that PRT will be able to meet this goal by the original due date.

***Goal: Reduce energy use by 5% by fiscal year 2007.***

Data from fiscal year 2003-04 were to be used as the baseline for determining progress toward reducing the amount of energy used by all PRT facilities. However, baseline energy use data is currently unavailable due to the loss of computer files during staff turnover in the PRT Facilities Management Section. Therefore, there is no substantiated data to support any reporting of progress toward this goal.

New baselines will be established for energy use by PRT using fiscal year 2004-05 data, and the Facilities Management Department will be responsible for gathering measurements. Progress reports will be made in the next Sustainability Plan Update in 2005, and it is expected that PRT will be able to meet this goal by the original due date.

## **Reporting on 2003 Plan Objectives**

The Department of Printing believes sustainability is essential for the continued health and vitality of Washington State. In support of this commitment, the agency set the following goals and objectives in the 2003 PRT Sustainability Plan for expanding sustainable practices in every area of operation.

## **Agency Values and Strategic Planning**

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***Objective: Include sustainability goals in all agency and division strategic plans by July 2004.***

Traditionally, the Department of Printing has produced a new strategic plan every two years in connection with the biennial cycle. The agency's last strategic plan was created in 2003, and includes goals with target dates through 2005. Because this strategic plan was created before the Department of Printing officially implemented a sustainability program, it does not include any formal goals or objectives related to sustainable initiatives.

However, the new 2005-07 Department of Printing Strategic Plan will include a Sustainability section, with the primary goal to "Utilize sustainable practices in all agency functions to safeguard the environmental health, economic growth, and quality of life of Washington citizens." In addition to agency-wide objectives, each division of the Department of Printing will create a strategic plan containing goals and objectives in support of the overall agency plan. This will ensure that every department of PRT creates sustainability goals for their area.

***Objective: Establish a Sustainable Practices Team composed of employees from every department to discuss opportunities, assess agency progress in achieving sustainability plan goals, and make recommendations for future action.***

In January 2004, Kelley Kellerman was appointed Sustainability Coordinator for the Department of Printing, and invitations were issued to managers in every department to join the new sustainability team. The new sustainability team, consisting of 12 volunteers representing every major function of the Department of Printing, met for the first time on February 23, 2004.

The team meets every month to learn about sustainability principles and discuss progress and challenges in achieving sustainability initiatives. The team has been active and committed to sustainability efforts, and attendance at meetings has been good. However, it has been necessary for some team members to miss meetings occasionally in order to meet production deadlines.

***Objective: Create a process to collect employee suggestions for improving sustainable practices throughout the agency by January 2004.***

Plans are in place to include a page in the sustainability section of the agency intranet that will allow any employee to make suggestions for new or improved sustainability projects. The suggestions will be routed

to the Sustainability Coordinator, who will act on the suggestion or forward it to the appropriate Sustainability Team member for review. The sustainability section of the intranet site is currently in progress, and is expected to be in place by the first quarter of 2005.

## Communication and Education

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***Objective: Provide online sustainability information, training opportunities, and links on the agency intranet by January 2005.***

In an effort to educate and involve all Department of Printing employees in sustainability, preliminary work began in June 2004 on a new sustainability section for the agency intranet. The intranet site is readily available to all employees, including personnel on the production floor, and is the most effective way of making sustainability information widely available.

The new sustainability site will include an explanation of basic sustainability principles, background on executive orders and factors driving statewide sustainability efforts, information on sustainability initiatives at PRT, links to Sustainable Washington and other resources, and a form for employees to offer suggestions for new sustainability initiatives. Copy for the site is currently being written, and we expect the new sustainability section to be posted by the end of January 2005.

***Objective: Include sustainable practices in the new-employee orientation on the agency intranet by January 2005.***

The Department of Printing currently uses an online presentation on the agency intranet for new employee orientation. When the new sustainability section of the intranet is completed, a link will be added to the orientation presentation so new employees can review basic sustainability principles, view the agency sustainability plan, and see what the Department of Printing is doing in support of sustainability initiatives. The link is expected to be in place by the end of January 2005.

***Objective: Post quarterly and annual updates on progress toward achieving sustainability and pollution prevention goals on bulletin boards and the agency intranet starting January 2005.***

The Department of Printing is currently on track to meet the target of posting progress toward sustainability goals starting in January 2005.

Work on this objective has been delayed somewhat by staff changeover in the area that tracks pollution and waste management data and by demands on employee time created by the implementation of several new, high-priority programs in the agency. However, plans are in place for a “Sustainability Corner” section on bulletin boards in the main plant production area and a link to sustainability progress reports is included in the mapping for the new sustainability page for the agency intranet.

***Objective: Continue to include waste management and sustainable practices issues in monthly employee safety meetings.***

Due to the nature of the printing industry, the Department of Printing has always included waste management issues in monthly Safety Meetings. However, these issues were mainly confined to worker safety, pollution prevention, and compliance with environmental regulations. Starting in March 2004, sustainability issues were added to the agenda for these monthly Safety Meetings. The Facilities Manager is a member of the agency’s sustainability team and acts as a liaison with the Safety Team, providing updates on sustainability team actions and gathering ideas and input from the safety team.

***Objective: Recommend that all individual employee training plans include classes about sustainability.***

The Employee Services Department is committed to making sustainability classes and workshops available to all employees. Employees throughout the agency have been invited to attend the free video showings and sustainability classes offered through the Interagency Sustainability Network. In addition, the Sustainability Coordinator has made a short presentation about sustainability principles and the PRT Sustainability Plan to Customer Service staff and Executive Management.

Unfortunately, low-cost sustainability training is not widely available at this time, and production demands limit the number of front-line employees who are able to attend classes and videos. It is difficult to make existing online sustainability training available to all employees because production staff and copy center staff, who make up approximately 59% of employees, are only able to access the Internet at a single computer in the Employee Services Department. Because of these challenges in obtaining and distributing training to employees, the Employee Services Department has not yet issued a recommendation to include classes about sustainability in all employee training plans.

However, the Employee Services Department has begun preliminary work on creating online training modules and internal classes to meet our goal of training all employees about sustainability. A member of the Employee Services staff is working with the Sustainability Coordinator to make online training modules available to all employees through the agency intranet. These modules will either be created in-house or adapted from existing training materials. In addition, the recommendation has been made that sustainability information be included in all agency-wide meetings and recognition events, and the short sustainability presentation be given to each department of the agency. It is hoped that once the training modules are in place and the policy toward sustainability training is established an official recommendation will be made that all employees include sustainability classes in their individual training plans.

***Objective: Expand and update information about PRT's environmentally responsible production processes for the agency Web site.***

A new Sustainable Printing page was added to the Department of Printing website in July 2004. The web page includes information about current sustainable practices at PRT, tips to help customers order sustainable print and mail jobs, and links to the PRT Sustainability Plan and the Sustainable Washington website.

The content of the Sustainable Printing page will be updated regularly by the Sustainability Coordinator to ensure PRT customers always have access to complete, accurate information.

***Objective: Include articles about sustainable printing practices in agency newsletters for employees and external customers.***

The Department of Printing customer newsletter, *Washington PrintWorks*, began offering a regular feature about sustainable printing issues in the March/April 2004 edition. Every issue of the newsletter now contains "Focus on Sustainable Printing" article explaining a sustainable printing issue and giving customers advice on how to make their printing and mailing projects more environmentally responsible.

In addition, *The Star*, the agency's internal newsletter now includes a sustainability article in every issue to educate employees about sustainability issues and inform everyone about sustainability efforts at the Department of Printing.

***Objective: Encourage supervisors and managers to include sustainability information in regular staff meetings.***

Most sections of the Department of Printing hold staff meetings every other week, with the remainder holding monthly staff meetings. All managers have been encouraged by the Executive Team to include



sustainability topics in these regular staff meetings. Because most of the managers are also on the agency sustainability team, they are able to pass on news about sustainability initiatives and gather ideas from staff fairly efficiently. However, it remains a challenge to make sure that all managers, including those not on the agency sustainability team, have accurate, up-to-date sustainability information at all times.

## Use of Materials, Energy, and Water

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### ***Objective: Establish baseline energy and water usage levels at fiscal year 2002.***

Originally, data from fiscal year 2003 were to be used as the baseline for determining progress toward achieving PRT sustainability goals. However, baseline data is currently unavailable for energy and water use due to the misplacement of computer files during multiple staff turnovers in the PRT Facilities Management Section.

New baselines will be established for energy and water usage at fiscal year 2004 levels, and progress toward sustainability goals will be made in the next Sustainability Plan Update in 2005.

### ***Objective: Switch to computer-to-plate printing by 2005 to reduce the use of film and processing solutions.***

In December 2004, the Department of Printing Prepress Department began producing printing plates using Computer-to-Plate (CtP) technology. The new equipment produces printing plates directly from computer files, eliminating the need to output intermediate film negatives for most print jobs.

The following list describes how CtP makes the process of producing printing plates more sustainable:

- By eliminating the need to output film for approximately 90 percent of press jobs, CtP reduces the amount of film used at PRT by an average of 4400 square feet per month. This figure is expected to climb by an additional 1000 square feet per month when the existing web press is replaced with equipment capable of accepting CtP plates.
- Because the process is completely digital, CtP is much more stable and accurate than manual plate burning methods. As a result, the need to re-burn spoiled plates is nearly eliminated and the use of film, processing solutions, and energy is decreased while film waste is reduced.
- The CtP plates use a different chemistry than traditional plates, and are too sensitive to be combined with solvent-based press solutions. This means that none of the press solutions used for printing at PRT are based on solvents, reducing the amount of hazardous waste and VOCs produced during printing.
- Because printing plates are now produced in a single step on one highly efficient, digital machine, the amount of processing solutions used to produce printing plates has been reduced by approximately 85 percent over the traditional film-based workflow. It is expected that this figure will climb to 95 percent as the last remaining presses are switched over to CtP plates.
- The digital workflow makes it easier to use electronic proofs instead of printed copies. Use of soft proofs, computer files emailed to customers for approval, eliminates the need to print and transport proof copies and approval forms. This reduces the amount of paper, toner, and energy used in prepress and eliminates the pollution created during the transport of printed proofs. Since CtP was implemented, customer use of soft proofs has risen by 10 percent.
- By transitioning to a totally digital workflow, PRT is able to store electronic originals of print jobs instead of hard-copy artwork. This not only reduces the amount of paper and storage space used, but also increases the amount of time originals are available to customers.

The transition to CtP was not very difficult for PRT because we were able to adapt existing image setting workflows quite easily. The main challenges were educating customers about the use of digital proofs and training press staff to work with the new printing plates.

***Objective: Work with General Administration to repair water leaks and install energy-efficient lighting wherever possible.***

General Administration staff maintains all water and lighting at Department of Printing buildings. Water leaks are reported to General Administration immediately and are repaired within 72 hours. Currently, all fluorescent light tubes throughout the PRT main plant have been replaced with energy efficient models that require less energy to start. Facilities Management staff will continue to work with General Administration in the future to ensure that water and energy are used efficiently.

***Objective: Establish a written “turn it off” policy to reduce energy drains from unused office machines, production equipment and small appliances.***

Because the Department of Printing uses production equipment which runs for multiple shifts each day in addition to office machines, it is difficult to craft an overall written “turn it off” policy for all sections of the agency. Instead, an informal policy is communicated to new employees and understood by staff to include the conscious effort to turn off office equipment and small appliances when not in use. In addition, educational flyers encouraging employees to turn off office equipment when not in use will be posted on the Sustainability Corner bulletin board.

***Objective: Reduce energy demands by purchasing Energy Star certified computers, small appliances and office equipment.***

As of June 30, 2004, all computers, monitors and printers purchased by the Department of Printing are Energy Star compliant. Any existing equipment that does not meet Energy Star standards will be gradually phased out as it is replaced with new, more efficient equipment.

***Objective: Use electronic communication and online ordering to reduce the amount of office paper used.***

Many of the administrative functions that previously required printed paper forms are being replaced with online or electronic processes. For example, customers now request cost estimates through e-mail or an online form instead of filling out a paper form and transporting it to the Department of Printing. When the cost estimate is completed, an email is sent to the customer instead of a computer printout.

In addition, a laptop and projector are available through the Information Technology Department to make it easy for presenters to show electronic documents at meetings instead of printing multiple copies of agendas and reference documents.

## Pollution Reduction

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***Objective: Encourage car-pooling, use of mass transit, and other commute reduction strategies to reduce the amount of pollution produced by employees in traveling to and from work.***

The agency currently promotes the STAR pass in the new employee orientation and the internal employee newsletter to encourage employees to use mass transit. The Employee Services office also acts as a central contact point for employees who want to establish a vanpool. In addition, the agency has established seven VPN (Virtual Private Network) accounts to allow employees who telecommute to access the information on their workstations easily from home.

***Objective: Initiate a vehicle maintenance program by January 2004 to reduce oil leaks and other sources of pollution and ensure all agency-owned vehicles perform with highest fuel efficiency possible.***

Documentation on vehicle maintenance procedures is currently unclear due to varying procedures used by truck drivers and inaccurate data entry. However, initial work has been started on creating a vehicle maintenance program, including plans for new procedures for reporting vehicle mileage and maintenance. The Facilities Management section will work with delivery drivers to create an effective maintenance program, which is now expected to be in place by December 2005.

***Objective: Increase employee recycling of glass, aluminum, plastic, and cardboard.***

Large bins are in place throughout the main plant and at all satellite copy centers to collect cardboard from production processes and employee use for recycling. Cardboard collected in these bins is sold to a recycler and creates a small amount of additional revenue for PRT.

In addition, recycling collection centers have been created for lunch and break areas at the main plant to make it as easy as possible for employees to recycle glass, aluminum, and plastic.

***Objective: Implement a regular inspection and maintenance process to ensure all ventilation systems are operating effectively by January 2004.***

Most heating and ventilation systems throughout the PRT main plant and copy centers are maintained by General Administration, which ensures that all units are inspected and maintained for optimum performance. However, the ventilation system for the PRT computer server room is the responsibility of the Department of Printing. The agency has contracted with Temperature Control Mechanical Service Corporation (TCMS) to regularly inspect and maintain the server room HVAC system. Together, General Administration and TCMS ensure that all PRT heating and ventilation systems are operating efficiently.

***Initiative: Switch to a low-emission press wash solution.***

The Department of Printing will be the first pressroom in Washington State to use a new, reformulated press wash solution with 35 percent lower VOCs by volume than previous solutions. The PRT pressroom worked with vendors to test the new product, and placed the first order for the new 66 Press Wash in September 2004.

***Initiative: Use ink sludge and pressroom waste to create energy.***

The Department of Printing Pressroom has established a partnership with a resource recovery and waste management company to convert ink sludge, used press wash, and waste cloths used to clean press blankets as an alternative energy source. Pressroom waste will be placed in 55-gallon drums and sent to Rineco's facility in Arkansas. There, it will be blended with fuel and incinerated at extremely high temperatures as a replacement for coal and natural gas for cement kilns.

Previously, used press wash and non-recyclable ink sludge were disposed of according to hazardous waste requirements and blanket wash rolls were sent to the landfill because they contain no hazardous chemicals. The new initiative keeps these used pressroom products out of the waste stream and provides an alternative energy source. In addition, PRT will receive payment for the waste provided to Rineco, instead of paying fees for trucking and disposing of the material.

The Department of Printing will receive certificates from Rineco verifying the amount of BTUs produced by our pressroom waste. Data and results of this new initiative will be reported in the 2005 Sustainability Plan Update.

***Initiative: Recycle or donate all used computer equipment to keep toxic waste out of landfills.***

The Department of Printing is currently taking advantage of Dell's Asset Recovery Service to recycle or resell used computer equipment. The program allows us to return computers, monitors, and printers to Dell for recycling, or to resell usable equipment through Value Recovery and receive cash back for old computer equipment. Any computers that do not qualify for the Dell program are sent to state surplus for re-use or recycling.

## Use of Non-toxic, Recycled, and Remanufactured Materials

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***Objective: Continue to use only processed chlorine-free paper with the highest recycled fiber content possible for all in-house stock and office paper.***

The Department of Printing continues to stock only recycled, process chlorine free paper for use in office printers, copiers and fax machines. In addition, the paper kept in stock for print jobs is process chlorine free and contains the highest percentage of recycled content possible. Most in-house uncoated paper contains 30 percent post-consumer recycled content, and in-house coated sheets are 10 percent recycled. Unfortunately, some jobs done on the web press, especially letterhead and forms that will be run through a printer or copier after printing, require virgin roll stock in order to meet end-user quality requirements.

The Department of Printing is committed to using high-recycled content, chlorine free paper whenever possible. However, efforts to increase the recycled content of paper used at the agency face challenges from current trends in the printing and paper industries. Private printers, especially those who print forms, continue to rely on virgin sheets, which cost approximately six to seven percent less than comparable recycled stock and continue to run more reliably through office equipment after printing. In fact, use of virgin stock is so prevalent in the forms printing industry that it is often difficult to find supplies or vendors capable of producing forms on recycled paper.

The Department of Printing continues to encourage the use of recycled paper and regularly discusses the need for cost-effective recycled stock with all of our paper suppliers. The agency continues to work with suppliers and vendors to provide sustainable paper choices that meet state government's need for cost-effective, high-quality printing.

***Objective: Purchase only remanufactured toner cartridges for all copiers and printers, and recycle all used cartridges.***

The Department of Printing continues to recycle all used printer toner cartridges as in the past. However, PRT has had very little success in using remanufactured cartridges in our current equipment. The agency has purchased remanufactured toner cartridges from three different vendors, and all have resulted in toner leakage, excessive paper jams, and increased overall machine maintenance. As a result, the agency currently purchases only new printer toner cartridges. However, PRT continues to search for a source of remanufactured toner cartridges that produce the quality and reliability we need, and plans to switch from new cartridges as soon as possible.

***Objective: Ensure all new and replacement office furniture is constructed of non-toxic, renewable materials, using refinished or surplus furniture whenever possible.***

Most Department of Printing staff work in cubicles produced by Correctional Industries. Desks used by employees who do not work in cubicles are almost exclusively obtained from state surplus, with any cleaning and re-finishing performed by Correctional Industries. Other office furniture such as file cabinets and shelving are usually obtained from surplus, with the remainder purchased from the most cost-effective major office supply retailer.

***Objective: Shift purchasing of office supplies to use pens, pencils, clips, etc. that are recyclable and are made from recycled materials.***

While a variety of recycled office supplies are currently available, they cost from 30 to 60 percent more than standard office supplies. As a result, the Purchasing Department at PRT has chosen not to pursue the purchase of recyclable and recycled office supplies in the interest of cost effectiveness. The agency will continue to monitor the availability and pricing of environmentally friendly office supplies, and will switch to alternative sources as they become financially feasible.

## Environmentally Preferable Purchasing

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***Objective: Seek out vendors who use sustainable processes and production materials when bidding jobs to private printers and binderies.***

The Contracts Department is responsible for bidding out jobs to private vendors and maintaining contracts for computer forms and envelopes. Jobs are bid to vendors according to customer specifications, and are given to the vendor that is able to meet these specifications most cost effectively. Because most customers request recycled paper, over half of the work sent to outside vendors through the Contracts Department is produced on recycled paper. However, some customers continue to request virgin stock because it costs less than recycled paper or works better in the customer's equipment. Moreover, recycled paper is simply not available for some applications, such as certain colors of carbonless forms. As a result of the constraints imposed by the cost and availability of recycled paper and the need to meet customer specifications, the goal of expanding the use of sustainable processes and production materials to our vendors will require long-term commitment and patience.

When a vendor wishes to do business with the Department of Printing, they must complete a vendor application form detailing their experience and services offered. Vendor records are then kept on file in the Contracts Department to allow the Department of Printing to quickly determine which vendors should receive invitations to bid on incoming orders. The vendor application form does not currently ask for information about the vendor's processes or materials. Due to re-organization and staff changes in the Contracts Department, work on the goal of gathering information on vendor's sustainable practices has been delayed. However, discussions have been held on the best way to gather this information, and how it may be used when bidding out jobs. We expect to have a process in place by June 30, 2005.

***Objective: Amend custodial service contracts to require the use of organic, non-phosphate cleaning agents.***

General Administration performs all custodial service at Department of Printing buildings. General Administration has repeatedly expressed their commitment to ensure that all supplies used by their custodial staff are environmentally safe. The Department of Printing considers this public commitment from General Administration to have the same effect as a written contract. The agency looks forward to working with GA as it moves forward with ongoing efforts to increase the use of organic, non-phosphate cleaning agents.

***Objective: Purchase supplies and equipment that support sustainable goals.***

All areas of the Department of Printing are currently reviewing supplies and equipment to ensure they use energy and natural resources effectively. For example, the press department purchases ink and press solutions that are water-based and non-toxic instead of using traditional petroleum-based products. Details about other ongoing efforts to purchase and use sustainable materials and equipment are detailed in other sections of this report as appropriate.

## Waste Reduction

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***Objective: Print two-sided documents whenever possible.***

Employees are encouraged to print and copy two-sided documents whenever possible. However, some documents must be printed single-sided because of the way they are used. For example, job tickets must be printed single-sided because employees must be able to see all the instructions for the job through the clear window of the job ticket envelopes. The agency will continue to educate employees and initiate processes to reduce the amount of one-sided copying needed and reduce overall office paper use in the long term.

***Objective: Recycle all fluorescent lights.***

All used fluorescent lights in the Department of Printing main plant and satellite copy centers are collected by General Administration for recycling.

***Initiative: Re-use ink packaging material.***

All boxes used to ship ink to the Department of Printing pressroom are currently broken down and returned to the manufacturer so they can be re-used for other shipments. These boxes cost an average of \$1.25 each and PRT receives 50 to 100 boxes each month. As a result, re-using ink shipment boxes not only reduces waste, it also saves up to \$125 per month in box production costs.

## Statewide Performance Measures

The following performance measures represent data collected for the fiscal year ending June 30, 2004. Whenever possible, this information is compared to previous or baseline data contained in the 2003 Sustainability Plan.

### **Paper Use:**

Many different weights and sizes of paper are used in printing, including flat sheets in sizes from 8½" x 11" to 26" x 40", and roll stock measured by weight. Because production paper uses so many different units of measure, it is almost impossible to give a truly accurate accounting of the total amount of paper used for all printing produced at PRT.

Therefore, the following data includes only standard business paper for internal use in office copiers, printers, and fax machines. The quantities given are given as equivalents to 8½" x 11" sheets, with each 11" x 17" sheet counting as two 8½" x 11" sheets.

| <b>Paper</b>                          | <b>Recycled Content</b>                             | <b>FY 2002 Qty.<br/>(8 ½" x 11")</b> | <b>FY 2003 Qty.<br/>(8 ½" x 11")</b> |
|---------------------------------------|---|--------------------------------------|--------------------------------------|
| 20# Laser Copy,<br>8 ½" x 11"         | 30% post-consumer                                   | 625,500                              | 740,000                              |
| 20# Laser Copy,<br>8 ½" x 14"         | 30% post-consumer                                   | 15,000                               | 15,000                               |
| 20# Laser Copy,<br>11" x 17"          | 30% post-consumer                                   | 40,000                               | 190,000                              |
| 60# Smooth Opaque Text,<br>8 ½" x 11" | 30% post-consumer                                   | 23,000                               | 60,000                               |
| 60# Smooth Opaque Text,<br>11" x 17"  | 30% post-consumer                                   | 5,000                                | 30,000                               |
| <b>TOTALS</b>                         | <b>30% Post-consumer,<br/>Process Chlorine Free</b> | <b>708,500</b>                       | <b>1,035,000</b>                     |

### **Vehicle Use and Fuel Efficiency:**

The Department of Printing owns and operates eight vehicles for pickup and delivery of jobs. Because the agency began tracking mileage for these vehicles in June 2003, no figures are available for the miles driven for fiscal year 2002-03.

Estimated data for the 2003 Sustainability Plan was determined by measuring miles traveled by PRT drivers for 30 working days. During this time, PRT drivers traveled a total of 5474 miles and averaged 182.5 miles per day. Using this number as a base and assuming an average of 22 working days per month, we estimated that vehicles owned by PRT traveled approximately 48,000 miles in fiscal year 2002-03.

Unfortunately, data collected to measure the miles driven by agency fleet vehicles during fiscal year 2003-04 proved inaccurate due to varying data entry by truck drivers and unclear information gathering procedures. Because no accurate mileage figures are available, PRT has used fuel usage figures to estimate miles traveled by fleet vehicles this fiscal year. The number of gallons of fuel purchased by the agency rose 17 percent in 2003 over the previous fiscal year. Because miles traveled should follow a

similar trend to fuel purchases, the previous yearly mileage estimate was increased by 17 percent to arrive at the estimated figure given in the table below.

New procedures are being implemented to allow PRT to gather accurate information about miles traveled by agency fleet vehicles in the future, and actual miles traveled will be reported in the 2005 Sustainability Plan Update.

In addition to agency-owned vehicles used for pickup and delivery, Customer Education Specialists and other staff use their personal vehicles to travel to the offices of customers statewide. A new Customer Education program was established in February 2004 to provide customers with on-site training and information about PRT services. As a result of this new program, the number of miles traveled by employees in personal vehicles increased significantly this year as three employees traveled across the state to meet with customers.

The following table shows the average fuel efficiency and estimated miles traveled on agency business for both agency-owned and employee-owned vehicles. Because actual fuel efficiency data was unavailable, the average fuel efficiency numbers given in the table below were obtained from the Bureau of Transportation Statistics website at [http://www.bts.gov/publications/national\\_transportation\\_statistics/2003/html/table\\_04\\_23.html](http://www.bts.gov/publications/national_transportation_statistics/2003/html/table_04_23.html).

| <b>Vehicle Description</b> | <b>Type of Fuel</b> | <b>Avg. Fuel Efficiency (miles/gal)</b> | <b>FY 2002-03 Miles Traveled</b>                                       | <b>FY 2003-04 Miles Traveled</b>                                       |
|----------------------------|---------------------|---|--|--|
| 1989 Chevy Cube            | Diesel              | 16.1                                    | <b>Estimated</b><br><br>48,000<br>(Total of All Agency Fleet Vehicles) | <b>Estimated</b><br><br>56,160<br>(Total of All Agency Fleet Vehicles) |
| 1995 Ford Cube Truck       | Diesel              | 17.3                                    |  |  |
| 2001 Grumman Workhorse     | Gasoline            | 17.6                                    |  |  |
| 1992 Ford Aerostar         | Gasoline            | 17.3                                    |  |  |
| 1995 GMC Step              | Gasoline            | 17.3                                    |  |  |
| 1997 Ford Van              | Gasoline            | 17.2                                    |  |  |
| 2001 Chevy Express Van     | Gasoline            | 17.6                                    |  |  |
| 1992 Chevy Van             | Gasoline            | 17.3                                    |  |  |
| Personal Vehicles          | Gasoline            | 21.9                                    | <b>Actual</b><br>20,900  | <b>Actual</b><br>36,385  |
| <b>Total</b>               |                     |   | <b>68,900</b>  | <b>92,545</b>  |

#### **Fuel Use:**

The Department of Printing owns and operates eight vehicles for pickup and delivery of jobs. Print volumes at the Department of Printing increased in fiscal year 2003, requiring these agency vehicles to travel more miles than the previous year. As a result, agency fleet vehicles used slightly more fuel than in fiscal year 2002.



The following table lists fuel purchases for Department of Printing delivery vehicles during the past two fiscal years.

| <b>Type of Fuel</b> | <b>FY 2002-03<br/>Gallons</b> | <b>FY 2003-04<br/>Gallons</b> |
|---------------------|-------------------------------|-------------------------------|
| Gasoline            | 2217                          | 2563                          |
| Diesel              | 392                           | 495                           |
| <b>Total</b>        | <b>2609</b>                   | <b>3058</b>                   |

**Number of Full-time Employees:**

Current: 138

Fiscal year 2003: 135

**Size and location of agency buildings:**

| <b>Name</b>       | <b>Location</b>   | <b>2003 Area<br/>(square feet)</b> | <b>2004 Area<br/>(square feet)</b> |
|-------------------|---|------------------------------------|------------------------------------|
| Main Plant        | 7580 New Market St. SW<br>Tumwater                                  | 70,000                             | 70,000                             |
| Copy Center 1     | General Administration Building<br>11 <sup>th</sup> Avenue, Olympia | 1,345                              | 1,345                              |
| Copy Center 6     | Ecology Building<br>Desmond Drive, Lacey                            | 2,714                              | 2,714                              |
| Copy Center 9     | OSPI Building<br>7 <sup>th</sup> and Franklin, Olympia              | 525                                | 525                                |
| Copy Center 10    | DSHS Building<br>Woodland Square Loop, Lacey                        | 576                                | 576                                |
| Copy Center 11    | Labor and Industries Building<br>Linderson Way, Tumwater            | 1,100                              | 1,100                              |
| Copy Center 12    | DNR Building<br>11 <sup>th</sup> and Washington, Olympia            | 2,038                              | 2,038                              |
| Copy Center 13    | CTED Building<br>9 <sup>th</sup> and Columbia, Olympia              | 433                                | 433                                |
| Copy Center 15    | DOH Building<br>Point Plaza East, Tumwater                          | 469                                | 500                                |
| <b>Total area</b> |   | <b>79,200</b>                      | <b>79,231</b>                      |

## **New and Updated Goals and Objectives**

The Department of Printing has set the following new or updated goals and objectives for the agency Sustainability Plan in response to progress toward previous goals and new requirement set forth in Executive Order 04-01:

### ***Objective: Purchase computers and electronics with the lowest level of PBTs possible, and return used computers to vendors for recycling or remanufacturing.***

In order to meet directives in Executive Order 04-01 to reduce the amount of persistent, bioaccumulative toxins in supplies and products used by state agencies, the Information Technology and Purchasing departments will switch to purchasing computers and electronic equipment with the lowest level of persistent toxic chemicals possible. In addition, the agency will take advantage of vendor programs to return used computers, monitors and printers for recycling and remanufacture. The switch to low PBT electronics will begin in the first quarter of 2004, and should be completed by July 2006 as equipment is replaced at the end of its useful life.

### ***Recycle all used shrinkwrap and plastic packaging materials by July 2005.***

Shrinkwrap, plastic bags, and other plastic packaging materials are received in many incoming supply shipments, and waste plastic is produced when setting up PRT packaging equipment. The agency will work with recycling vendors to ensure that all plastic packaging waste produced by the plant and received in incoming shipments is recycled instead of sent to a landfill. This goal should be accomplished by July 2005, and will be the responsibility of the Bindery Department. Progress will be measured by the quantity of plastic materials recycled.

### ***Use re-refined motor oil whenever possible in servicing all agency fleet vehicles and recycle all used oil to keep PBTs out of the environment.***

The Department of Printing will require that re-refined motor oil be used whenever possible when servicing all agency fleet vehicles, and that all used motor oil be recycled to keep PBTs out of the environment. This objective will be achieved within the limitations of the cost and availability of re-refined oil, with a goal of using re-refined oil in all agency fleet vehicles by July 2006. Progress will be measured as the percentage of vehicles serviced with re-refined oil.

### ***Switch all existing diesel-powered vehicles in the PRT fleet to B20 biodiesel fuel by July 2009.***

The Department of Printing will switch to 20 percent biodiesel blend fuel for all diesel-powered vehicles to reduce the amount of persistent toxic chemicals released into the air. This objective will be accomplished as quickly as possible within the limitations of fuel availability and cost, and may involve a gradual transition using biodiesel blends with less than 20 percent biodiesel. The Shipping Department will work with Facilities Management to find fuel sources, inform PRT drivers of any changes in fueling procedures, and educate drivers about the importance of achieving this goal and the benefits of using biodiesel blends. Progress toward meeting this goal will be measured in the percentage of biodiesel contained in the fuel used by PRT delivery vehicles.